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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,965	10/24/2003	Barry A. O'Mahony	P17150	1852
59796	7590	09/13/2007		
INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER NGUYEN, THUAN T	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/692,965

Applicant(s)

O'MAHONY, BARRY A.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____  | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### *Remark*

1. Claims 9-15 and 22-30 have been cancelled, and claims 1-8 and 16-21 are pending for reconsideration.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-8 and 16-21 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

4. Claims 1-8 and 16-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Kerper (U.S. Patent No. 7,106,833 B2) in view of Hightower et al. (US Patent No. 5,496,966).

Regarding claim 1, Kerper teaches a method to determine whether if a device emits electromagnetic interference (EMI) in one or more regions of an electromagnetic spectrum occupied by other users, i.e., as shown in Figs. 1 & 3, EMI is identified within the network and a database for storing parameters which needs to evaluate and automatically fixing/adjusting EMI problems by assign or reshuffle the different transmit powers of each device and by optimizing its spectra for optimization efficiency (refer to col. 3/lines 30-49 & col. 4/lines 20-65).

Kerper might not suggest the step of “if yes, reducing the EMI in one or more regions and increasing the EMI in one or more other regions of the electromagnetic spectrum that are unoccupied by other users”; however, this technique is taught by Hightower as Hightower teaches either to reduce or increase the EMI based on occupied or unoccupied by other users in other areas, i.e., inside the bounded area and/or outside the bounded area (refer to Hightower, Fig. 1 and col. 8/line 33 to col. 9/line 16). Therefore, it would have been obvious to one of ordinary skill in the art to modify Kerper’s technique with Hightower’s teaching technique of controlling the reducing and increasing of EMI in order to better control the electromagnetic interference within an enclosure or outside through coordination by licensing and geographic (location or area) or frequency selection as disclosed by Hightower.

As for claims 2-3, Kerper teaches these feature as the algorithm calculates whether to reduce, remove or increase EMI in one or more regions (refer to col. 5/lines 4-32 & Fig. 7 and col. 9/line 27 to col. 10/line 24).

As for claim 4, this is inherently suggested as Kerper uses the term “subscriber” which referred to the licensed users (Fig. 1, and col. 5/line 59 to col. 6/line 20). In addition, Hightower teaches the requirement for obtaining licensing by FCC (col. 1/line 18 to col. 2/line 22).

As for claims 5-8, these features refer to the steps of checking whether a user is a licensed user and the determination of the location of the licensed users by accessing the database for information (Fig. 1 again for the database, col. 5/lines 4-32; col. 9/line 27 to col. 10/line 24 for algorithm on joint optimality and spectral compatibility; and col. 16/lines 31-59 for algorithm to determine the spectral density of subscribers).

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As for claims 16-21, these claims, with same features as addressed earlier in claims 1-8, are rejected for the reason given in the scope of claims 1-8 as disclosed above. For claim 16, Kerper might not suggest the step of “reducing the EMI in one or more regions and increasing the EMI in one or more other regions of the electromagnetic spectrum that are unoccupied by other users”; however, this technique is taught by Hightower as Hightower teaches either to reduce or increase the EMI based on occupied or unoccupied by other users in other areas, i.e., inside the bounded area and/or outside the bounded area (refer to Hightower, Fig. 1 and col. 8/line 33 to col. 9/line 16). Therefore, it would have been obvious to one of ordinary skill in the art to modify Kerper’s technique with Hightower’s teaching technique of controlling the reducing and increasing of EMI in order to better control the electromagnetic interference within an enclosure or outside through coordination by licensing and geographic (location or area) or frequency selection as disclosed by Hightower.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hightower et al. (US Patent 5,276,277) teaches the same technique as of Hightower’s ‘966 reference.

6. **Any response to this action should be mailed to:**  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to the New Central Fax number:**

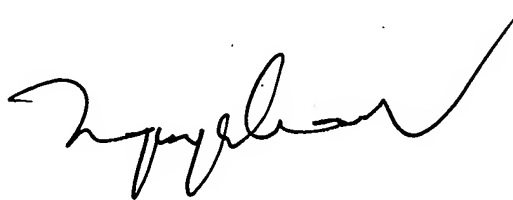
(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tony T. Nguyen', with a stylized flourish at the end.

Tony T. Nguyen  
Primary Examiner  
Art Unit 2618

TTN  
August 22, 2007